

58. (Amended) The fusion protein of claim 54, wherein the fusion protein is encoded by plasmid pET65MP/NP-B or plasmid pET65MP/NP-D.

59. (Amended) The fusion protein of claim 54, wherein the antigen includes a CTL epitope.

61. (Amended) A fusion protein comprising an antigen of an influenza virus, or an antigenic portion thereof, and a bacterial stress protein, or a portion thereof, wherein the fusion protein induces an immune response against the antigen in a mammal to whom the fusion protein is administered.

62. (Amended) The fusion protein of claim 61, wherein the bacterial stress protein is a mycobacterial stress protein.

63. (Amended) A composition comprising the fusion protein of claim 54 and a pharmaceutically acceptable excipient, carrier, diluent, or vehicle.

64. (Amended) A method of inducing an immune response against an antigen of an influenza virus, the method comprising administering the fusion protein of claim 54 to a vertebrate in an amount effective to induce an immune response against the antigen.

65. (Amended) The method of claim 64, wherein the fusion protein is administered in combination with a pharmaceutically acceptable excipient, carrier, diluent, or vehicle.

66. (Amended) A method of inducing an immune response against an antigen of the influenza virus, the method comprising administering the fusion protein of claim 58 to a vertebrate in an amount effective to induce an immune response against the antigen.

67. (Amended) The method of claim 66, wherein the fusion protein is administered in combination with a pharmaceutically acceptable excipient, carrier, diluent, or vehicle. --

Add claims 68-106.

-- 68. The fusion protein of claim 54, wherein the immune response is a cell mediated immune response.

69. The fusion protein of claim 68, wherein the cell mediated immune response is a cell mediated cytolytic immune response.

70. The fusion protein of claim 68, wherein the cell mediated immune response is a class I-restricted T cell response.

71. The fusion protein of claim 68, wherein the cell mediated immune response is a class II-restricted T cell response.

72. The fusion protein of claim 59, wherein the CTL epitope is a class I-restricted T cell epitope.

73. The fusion protein of claim 59, wherein the CTL epitope is a class II-restricted T cell epitope.

74. The fusion protein of claim 62, wherein the stress protein is hsp65.

75. The fusion protein of claim 62, wherein the stress protein is hsp71.

76. The fusion protein of claim 54, wherein the stress protein is an Hsp100-200, an Hsp100, an Hsp90, Lon, an Hsp70, an Hsp60, TF55, an Hsp40, an FKBP, a cyclophilin, an Hsp20-30, C1pP, GrpE, Hsp10, ubiquitin, calnexin, or a protein disulfide isomerase.

77. The method of claim 64, wherein the immune response is a cell mediated immune response.

78. The method of claim 77, wherein the cell mediated immune response is a cell mediated cytolytic immune response.

79. The method of claim 77, wherein the cell mediated immune response is a class I-restricted T cell response.

80. The method of claim 77, wherein the cell mediated immune response is a class II-restricted T cell response.

81. A fusion protein comprising a human papillomavirus (HPV) antigen, or an antigenic portion thereof, and a stress protein or a portion thereof, wherein the fusion protein induces an immune response to the HPV antigen in a mammal to whom the fusion protein is administered.

82. The fusion protein of claim 81, wherein the HPV antigen is an E6 protein.

83. The fusion protein of claim 81, wherein the HPV antigen is an E7 protein.

84. The fusion protein of claim 81, wherein the HPV antigen includes a CTL epitope.

85. The fusion protein of claim 84, wherein the CTL epitope is a class I-restricted T cell epitope.

86. The fusion protein of claim 84, wherein the CTL epitope is a class II-restricted T cell epitope.

87. The fusion protein of claim 81, wherein the stress protein is a bacterial stress protein.

88. The fusion protein of claim 81, wherein the stress protein is an Hsp100-200, an Hsp100, an Hsp90, Lon, an Hsp70, an Hsp60, TF55, an Hsp40, an FKBP, a cyclophilin, an Hsp20-30, C1pP, GrpE, Hsp10, ubiquitin, calnexin, or a protein disulfide isomerase.

89. The fusion protein of claim 81, wherein the stress protein is a mycobacterial stress protein.

90. The fusion protein of claim 89, wherein the stress protein is hsp65.

91. The fusion protein of claim 89, wherein the stress protein is hsp71.

92. The fusion protein of claim 81, wherein the immune response is a cell mediated immune response.

93. The fusion protein of claim 92, wherein the cell mediated immune response is a cell mediated cytolytic immune response.

94. The fusion protein of claim 92, wherein the cell mediated immune response is a class-I restricted T cell response.

95. The fusion protein of claim 92, wherein the cell mediated immune response is a class II-restricted T cell response.

96. A composition comprising the fusion protein of claim 81 and a pharmaceutically acceptable excipient, carrier, diluent, or vehicle.

97. A method of preventing or treating an HPV infection in a mammal, the method comprising administering the fusion protein of claim 81 to the mammal in an amount effective to induce an immune response against the antigen.

98. The method of claim 97, wherein the fusion protein is administered in combination with a pharmaceutically acceptable excipient, carrier, diluent, or vehicle.

99. The method of claim 97, wherein the immune response is a cell mediated immune response.

100. The method of claim 99, wherein the cell mediated immune response is a cell mediated cytolytic immune response.

101. The method of claim 99, wherein the cell mediated immune response is a class I-restricted T cell response.

102. The method of claim 99, wherein the cell mediated immune response is a class II-restricted T cell response.

103. A method of preventing or treating an HPV infection in a mammal, the method comprising administering the fusion protein of claim 82 to the mammal in an amount effective to induce an immune response against the antigen.

104. A method of preventing or treating an HPV infection in a mammal, the method comprising administering the fusion protein of claim 83 to the mammal in an amount effective to induce an immune response against the antigen.

105. The fusion protein of claim 83, wherein the stress protein is mycobacterial Hsp65.

106. A method of preventing or treating an HPV infection in a mammal, the method comprising administering the fusion protein of claim 105 to the mammal in an amount effective to induce an immune response against the antigen.--